

CITY OF CRYSTAL

ORDINANCE #2016 - 04

**AN ORDINANCE AMENDING SECTION 515.61 OF THE CRYSTAL
CITY CODE REGARDING FLOODPLAIN REGULATIONS**

The City of Crystal ordains:

ARTICLE I. Chapter IV, Section 515.61 is deleted in its entirety and replaced with the following new floodplain overlay material:

515.61
Floodplain Overlay

Subdivision 1. Statutory Authorization, Findings of Fact and Purpose.

- a) **Statutory Authorization.** The legislature of the State of Minnesota has, in Minnesota Statutes, Chapter 103F and Chapter 462 delegated the responsibility to local government units to adopt regulations designed to minimize flood losses.
- b) **Purpose.**
 - 1) This subsection regulates development in the flood hazard areas of the City. These flood hazard areas are subject to periodic inundation, which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base. It is the purpose of this subsection to promote the public health, safety, and general welfare by minimizing these losses and disruptions.
 - 2) **National Flood Insurance Program Compliance.** This subsection is adopted to comply with the rules and regulations of the National Flood Insurance Program codified as 44 Code of Federal Regulations Parts 59 -78, as amended, so as to maintain the community's eligibility in the National Flood Insurance Program.
 - 3) This ordinance is also intended to preserve the natural characteristics and functions of watercourses and floodplains in order to moderate flood and stormwater impacts, improve water quality, reduce soil erosion, protect aquatic and riparian habitat, provide recreational opportunities, provide aesthetic benefits and enhance community and economic development.

Subd. 2. General Provisions.

- a) How to Use This Subsection. This subsection adopts the floodplain maps applicable to the City and includes three floodplain districts: Floodway, Flood Fringe, and General Floodplain (collectively, "Flood Districts").
- 1) Where Floodway and Flood Fringe districts are delineated on the floodplain maps, the standards in Subdivisions 4 or 5 will apply, depending on the location of a property.
 - 2) Locations where Floodway and Flood Fringe districts are not delineated on the floodplain maps are considered to fall within the General Floodplain district. Within the General Floodplain district, the Floodway District standards in Subdivision 4 apply unless the floodway boundary is determined, according to the process outlined in Subdivision 6. Once the floodway boundary is determined, the Flood Fringe District standards in Subdivision 5 may apply outside the floodway.
- b) Lands to Which this Subsection Applies. This subsection applies to all lands within the jurisdiction of the City shown on the city's zoning map and/or the attachments to the map as being located within the boundaries of the Flood Districts.
- 1) The Floodway, Flood Fringe and General Floodplain Districts are overlay districts that are superimposed on all existing zoning districts. The standards imposed in the overlay districts are in addition to any other requirements in this subsection. In case of a conflict, the more restrictive standards will apply.
- c) Incorporation of Maps by Reference. The following maps together with all attached material are hereby adopted by reference and declared to be a part of the zoning map of Crystal, Minnesota and this subsection. The attached material includes the Flood Insurance Study for Hennepin County, Minnesota, and Incorporated Areas, dated November 4, 2016 and the Flood Insurance Rate Map panels enumerated below, dated November 4, 2016, all prepared by the Federal Emergency Management Agency. These materials are on file at Crystal City Hall.

Effective Flood Insurance Rate Map panels:

| | | | |
|-------------|-------------|-------------|-------------|
| 27053C0192F | 27053C0203F | 27053C0211F | 27053C0213F |
| 27053C0194F | 27053C0204F | 27053C0212F | 27053C0214F |

- d) Regulatory Flood Protection Elevation. The regulatory flood protection elevation (RFPE) is an elevation no lower than one foot above the elevation of the regional

flood plus any increases in flood elevation caused by encroachments on the floodplain that result from designation of a floodway.

- e) Interpretation. The boundaries of the Flood Districts are determined by scaling distances on the Flood Insurance Rate Map.
 - 1) Where a conflict exists between the floodplain limits illustrated on the City's zoning map and actual field conditions, the flood elevations shall be the governing factor. The Zoning Administrator must interpret the boundary location based on the ground elevations that existed on the site on the date of the first National Flood Insurance Program map showing the area within the regulatory floodplain, and other available technical data.
 - 2) Persons contesting the location of the district boundaries will be given a reasonable opportunity to present their case to the Board of Appeals and Adjustments and to submit technical evidence.
- f) Warning and Disclaimer of Liability. This subsection does not imply that areas outside the floodplain districts or land uses permitted within such districts will be free from flooding or flood damages. This subsection does not create liability on the part of the City or its officers or employees for any flood damages that result from reliance on this subsection or any administrative decision lawfully made hereunder.
- g) Definitions. Unless specifically defined below, words or phrases used in this subsection must be interpreted according to common usage and so as to give this subsection its most reasonable application.
 - 1) *Base Flood Elevation.* The elevation of the "regional flood." The term "base flood elevation" is used in the flood insurance survey.
 - 2) *Basement.* An area of a building, including crawl spaces, having its floor or base subgrade (below ground level) on all four sides, regardless of the depth of excavation below ground level.
 - 3) *City.* The City of Crystal and all territory lying within its boundaries over which it has jurisdiction.
 - 4) *Conditional Use.* A specific type of land use listed in the official control that may be allowed but only after an in-depth review procedure and with appropriate conditions or restrictions as provided in the official zoning controls or building codes and upon a finding that:
 - i) Certain conditions as detailed in the zoning ordinance exist.

- ii) The land use conforms to the comprehensive land use plan and is compatible with the existing neighborhood.
- 5) *Critical Facilities.* Facilities necessary to a community's public health and safety, those that store or produce highly volatile, toxic or water-reactive materials, and those that house occupants that may be insufficiently mobile to avoid loss of life or injury. Examples of critical facilities include schools, daycare facilities, nursing homes, fire and police stations, wastewater treatment facilities, public electric utilities, water plants, fuel storage facilities, and waste handling and storage facilities.
- 6) *Development.* Any manmade change to improved or unimproved real estate, including buildings or other structures, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.
- 7) *Equal Degree of Encroachment.* A method of determining the location of floodway boundaries so that floodplain lands on both sides of a stream are capable of conveying a proportionate share of flood flows.
- 8) *Farm Fence.* A fence as defined by Minn. Statutes, section 344.02, Subd. 1(a)-(d). An open type fence of posts and wire is not considered to be a structure under this subsection. Fences that have the potential to obstruct flood flows, such as chain link fences and rigid walls, are regulated as structures under this subsection.
- 9) *Flood.* A temporary increase in the flow or stage of a stream or in the stage of a wetland or lake that results in the inundation of normally dry areas.
- 10) *Flood Frequency.* The frequency for which it is expected that a specific flood stage or discharge may be equaled or exceeded.
- 11) *Flood Fringe.* The portion of the Special Flood Hazard Area (one percent annual chance flood) located outside of the floodway. Flood fringe is synonymous with the term "floodway fringe" used in the Flood Insurance Study for Hennepin County, Minnesota.
- 12) *Flood Prone Area.* Any land susceptible to being inundated by water from any source (see "Flood").
- 13) *Floodplain.* The beds proper and the areas adjoining a wetland, lake or watercourse which have been or hereafter may be covered by the regional flood.
- 14) *Floodproofing.* A combination of structural provisions, changes, or adjustments to properties and structures subject to flooding, primarily for the reduction or elimination of flood damages.

- 15) *Floodway*. The bed of a wetland or lake and the channel of a watercourse and those portions of the adjoining floodplain which are reasonably required to carry or store the regional flood discharge.
- 16) *Lowest Floor*. The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage in an area other than a basement area, is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the building in violation of the applicable non-elevation design requirements of 44 Code of Federal Regulations, Part 60.3.
- 17) *Manufactured Home*. Manufactured home has the meaning given in Minnesota Statutes, section 327.31. The term "manufactured home" does not include the term "recreational vehicle."
- 18) *New Construction*. Structures, including additions and improvements, and placement of manufactured homes, for which the start of construction commenced on or after the effective date of this subsection.
- 19) *Obstruction*. Any, wall, embankment, pile, abutment, projection, excavation, channel modification, culvert, building, wire, fence, stockpile, refuse, fill, structure, or matter in, along, across, or projecting into any channel, watercourse, or regulatory floodplain which may impede, retard, or change the direction of the flow of water, either in itself or by catching or collecting debris carried by such water.
- 20) *One Hundred Year Floodplain*. Lands inundated by the "Regional Flood" (see definition).
- 21) *Reach*. A hydraulic engineering term to describe a longitudinal segment of a stream or river influenced by a natural or man-made obstruction. In an urban area, the segment of a stream or river between two consecutive bridge crossings would most typically constitute a reach.
- 22) *Recreational Vehicle*. Recreational vehicle has the meaning given in Minnesota Statutes, section 168.002. For the purposes of this subsection, the term recreational vehicle is synonymous with the term "travel trailer/travel vehicle."
- 23) *Regional Flood*. A flood which is representative of large floods known to have occurred generally in Minnesota and reasonably characteristic of what can be expected to occur on an average frequency in the magnitude of the 1% chance or 100-year recurrence interval. Regional flood is synonymous with the term "base flood" used in a flood insurance study.
- 24) *Regulatory Flood Protection Elevation (RFPE)*. An elevation not less than one foot above the elevation of the regional flood plus any increases in flood

elevation caused by encroachments on the floodplain that result from designation of a floodway.

- 25) *Repetitive Loss.* Flood related damages sustained by a structure on two separate occasions during a ten year period for which the cost of repairs at the time of each such flood event on the average equals or exceeds 25% of the market value of the structure before the damage occurred.
- 26) *Special Flood Hazard Area.* A term used for flood insurance purposes synonymous with “One Hundred Year Floodplain.”
- 27) *Start of Construction.* Start of construction includes substantial improvement, and means the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement that occurred before the permit’s expiration date. The actual start is either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, foundations, or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main building. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.
- 28) *Substantial Damage.* Damage of any origin sustained by a structure where the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
- 29) *Substantial Improvement.* Within any consecutive 365-day period, any reconstruction, rehabilitation (including normal maintenance and repair), repair after damage, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the “start of construction” of the improvement. This term includes structures that have incurred “substantial damage,” regardless of the actual repair work performed. The term does not, however, include either:
 - i) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions.

- ii) Any alteration of a “historic structure,” provided that the alteration will not preclude the structure’s continued designation as a “historic structure.” For the purpose of this subsection, “historic structure” is as defined in 44 Code of Federal Regulations, Part 59.1.
- h) Annexations. The Flood Insurance Rate Map panels adopted by reference into Subdivision 2 above may include floodplain areas that lie outside of the corporate boundaries of the City at the time of adoption of this subsection. If any of these floodplain land areas are annexed into the City after the date of adoption of this subsection, the newly annexed floodplain lands will be subject to the provisions of this subsection immediately upon the date of annexation.
- i) Detachments. The Flood Insurance Rate Map panels adopted by reference into Subdivision 2 above will include floodplain areas that lie inside the corporate boundaries of municipalities at the time of adoption of this subsection. If any of these floodplain land areas are detached from a municipality and come under the jurisdiction of the City after the date of adoption of this subsection, the newly detached floodplain lands will be subject to the provisions of this subsection immediately upon the date of detachment.

Subd. 3. Establishment of Flood Districts

- a) Flood Districts.
 - 1) Floodway District. The Floodway District includes those areas within Zones AE that have a floodway delineated as shown on the Flood Insurance Rate Map adopted in Subdivision 2. For lakes, wetlands and other basins within Zones AE that do not have a floodway delineated, the Floodway District also includes those areas that are at or below the ordinary high water level as defined in Minnesota Statutes, section 103G.005, subdivision 14.
 - 2) Flood Fringe District. The Flood Fringe District includes areas within Zones AE that have a floodway delineated on the Flood Insurance Rate Map adopted in Subdivision 2, but are located outside of the floodway. For lakes, wetlands and other basins within Zones AE that do not have a floodway delineated, the Flood Fringe District also includes those areas below the 1% annual chance (100-year) flood elevation but above the ordinary high water level as defined in Minnesota Statutes, section 103G.005, subdivision 14.
 - 3) General Floodplain District. The General Floodplain District includes those areas within Zones A or AE that do not have a delineated floodway as shown on the Flood Insurance Rate Map adopted in Subdivision 2.
- b) Applicability. Within the Flood Districts established in this subsection, the use, size, type and location of development must comply with the terms of this subsection and other applicable regulations. In no cases shall floodplain development adversely affect the efficiency or unduly restrict the capacity of the

channels or floodways of any tributaries to the main stream, drainage ditches, or any other drainage facilities or systems. All uses not listed as permitted uses or conditional uses in Subdivisions 4.0, 5.0 and 6.0 are prohibited. In addition, critical facilities, as defined in Subdivision 2, are prohibited in all Flood Districts.

Subd. 4. Floodway District (FW).

- a) Permitted Uses. The following uses, subject to the standards set forth in subsection b), below, are permitted uses if otherwise allowed in the underlying zoning district or any applicable overlay district:
 - 1) General farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, forestry, sod farming, and wild crop harvesting.
 - 2) Industrial-commercial loading areas, parking areas, and airport landing strips.
 - 3) Open space uses, including but not limited to private and public golf courses, tennis courts, driving ranges, archery ranges, picnic grounds, boat launching ramps, swimming areas, parks, wildlife and nature preserves, game farms, fish hatcheries, shooting preserves, hunting and fishing areas, and single or multiple purpose recreational trails.
 - 4) Residential lawns, gardens, parking areas, and play areas.
 - 5) Railroads, streets, bridges, utility transmission lines and pipelines, provided that the Department of Natural Resources' Area Hydrologist is notified at least ten days prior to issuance of any permit.
- b) Standards for Floodway Permitted Uses.
 - 1) The use must have a low flood damage potential.
 - 2) The use must not obstruct flood flows or cause any increase in flood elevations and must not involve structures, obstructions, or storage of materials or equipment.
 - 3) Any facility that will be used by employees or the general public must be designed with a flood warning system that provides adequate time for evacuation if the area is inundated to a depth and velocity such that the depth (in feet) multiplied by the velocity (in feet per second) would exceed a product of four upon occurrence of the regional (1% chance) flood.
- c) Conditional Uses. The following uses may be allowed as conditional uses following the standards and procedures set forth in Subdivision 10 (d) of this subsection and further subject to the standards set forth in subsection d), below, if otherwise allowed in the underlying zoning district or any applicable overlay district.

- 1) Structures accessory to the uses listed in Subd. 4 (a), 1 to 3, above, and the uses listed in Subdivision 4 (c), 2 to 3, of this subsection.
 - 2) Extraction and storage of sand, gravel, and other materials.
 - 3) Marinas, boat rentals, docks, piers, wharves, and water control structures.
 - 4) Storage yards for equipment, machinery, or materials.
 - 5) Placement of fill or construction of fences that obstruct flood flows. Farm fences, as defined in Subdivision 2, are permitted uses.
 - 6) Levees or dikes intended to protect agricultural crops for a frequency flood event equal to or less than the 10-year frequency flood event.
- d) Standards for Floodway Conditional Uses.
- 1) All Uses. A conditional use must not cause any increase in the stage of the 1% chance or regional flood or cause an increase in flood damages in the reach or reaches affected.
 - 2) Fill; Storage of Materials and Equipment.
 - i) The storage or processing of materials that are, in time of flooding, flammable, explosive, or potentially injurious to human, animal, or plant life is prohibited.
 - ii) Fill, dredge spoil, and other similar materials deposited or stored in the floodplain must be protected from erosion by vegetative cover, mulching, riprap or other acceptable method. Permanent sand and gravel operations and similar uses must be covered by a long-term site development plan.
 - iii) Temporary placement of fill, other materials, or equipment which would cause an increase to the stage of the 1% percent chance or regional flood may only be allowed if the City Council has approved a plan that assures removal of the materials from the floodway based upon the flood warning time available.
 - 3) Accessory Structures. Accessory structures, as identified in Subdivision 4 (c) (1), may be permitted, provided that:
 - i) buildings are not intended for human habitation.
 - ii) structures will have a low flood damage potential.

- iii) structures will be constructed and placed so as to offer a minimal obstruction to the flow of flood waters.
- iv) Service utilities, such as electrical and heating equipment, within these buildings must be elevated to or above the regulatory flood protection elevation or properly floodproofed.
- v) Buildings must be elevated on fill or structurally dry floodproofed in accordance with the FP1 or FP2 floodproofing classifications in the State Building Code. All floodproofed buildings must be adequately anchored to prevent flotation, collapse or lateral movement and designed to equalize hydrostatic flood forces on exterior walls.
- vi) As an alternative, an accessory building may be internally/wet floodproofed to the FP3 or FP4 floodproofing classifications in the State Building Code, provided the accessory building constitutes a minimal investment and does not exceed 576 square feet in size. Designs for meeting this requirement must either be certified by a registered professional engineer or meet or exceed the following criteria:
 - a) To allow for the equalization of hydrostatic pressure, there must be a minimum of two “automatic” openings in the outside walls of the building, with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding; and
 - b) There must be openings on at least two sides of the building and the bottom of all openings must be no higher than one foot above the lowest adjacent grade to the building. Using human intervention to open a garage door prior to flooding will not satisfy this requirement for automatic openings.
- 4) Structural works for flood control that will change the course, current or cross section of protected wetlands or public waters are subject to the provisions of Minnesota Statutes, section 103G.245.
- 5) A levee, dike or floodwall constructed in the floodway must not cause an increase to the 1% chance or regional flood. The technical analysis must assume equal conveyance or storage loss on both sides of a stream.
- 6) Floodway developments must not adversely affect the hydraulic capacity of the channel and adjoining floodplain of any tributary watercourse or drainage system.

Subd. 5 Flood Fringe District (FF).

- a) Permitted Uses. Permitted uses are those uses of land allowed in the underlying zoning district(s) that comply with the standards in Subdivision 5 (b).

b) Standards for Flood Fringe Permitted Uses.

- 1) All buildings, including accessory buildings, must be elevated on fill so that the lowest floor, as defined, is at or above the regulatory flood protection elevation. The finished fill elevation for buildings must be no lower than one foot below the regulatory flood protection elevation and the fill must extend at the same elevation at least 15 feet beyond the outside limits of the building.
- 2) Accessory Buildings. As an alternative to the fill requirements of Subdivision 5 (b) (1), buildings accessory to the uses identified in Subdivision 5 (a) may be permitted to be internally/wet floodproofed to the FP3 or FP4 floodproofing classifications in the State Building Code, provided that:
 - i) the accessory building constitutes a minimal investment, does not exceed 576 square feet in size, and is only used for parking and storage.
 - ii) All portions of floodproofed accessory buildings below the Regulatory Flood Protection Elevation must be: (i) adequately anchored to prevent flotation, collapse or lateral movement and designed to equalize hydrostatic flood forces on exterior walls, (ii) be constructed with materials resistant to flood damage, and (iii) must have all service utilities be water-tight or elevated to above the regulatory flood protection elevation.
 - iii) Designs for meeting this requirement must either be certified by a registered professional engineer or meet or exceed the following criteria:
 - (a) To allow for the equalization of hydrostatic pressure, there must be a minimum of two "automatic" openings in the outside walls of the building, with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding; and
 - (b) There must be openings on at least two sides of the building and the bottom of all openings must be no higher than one foot above the lowest adjacent grade to the building. Using human intervention to open a garage door prior to flooding will not satisfy this requirement for automatic openings.
- 3) The cumulative placement of fill or similar material on a parcel must not exceed 1,000 cubic yards, unless the fill is specifically intended to elevate a building in accordance with Subdivision 5 (b) (1), or if allowed as a conditional use under Subdivision 5 (c) (3) below.

- 4) The storage of any materials or equipment must be elevated on fill to the regulatory flood protection elevation.
 - 5) All service utilities, including ductwork, must be elevated or water-tight to prevent infiltration of floodwaters.
 - 6) The storage or processing of materials that are, in time of flooding, flammable, explosive, or potentially injurious to human, animal, or plant life is prohibited.
 - 7) All fill must be properly compacted and the slopes must be properly protected by the use of riprap, vegetative cover or other acceptable method.
 - 8) All new principal buildings must have vehicular access at or above an elevation not more than two feet below the regulatory flood protection elevation, or must have a flood warning /emergency evacuation plan acceptable to the City.
 - 9) Accessory uses such as yards, railroad tracks, and parking lots may be at an elevation lower than the regulatory flood protection elevation. However, any facilities used by employees or the general public must be designed with a flood warning system that provides adequate time for evacuation if the area is inundated to a depth and velocity such that the depth (in feet) multiplied by the velocity (in feet per second) would exceed a product of four upon occurrence of the regional (1% chance) flood.
 - 10) Interference with normal manufacturing/industrial plant operations must be minimized, especially along streams having protracted flood durations. In considering permit applications, due consideration must be given to the needs of industries with operations that require a floodplain location.
 - 11) Manufactured homes and recreational vehicles must meet the standards of Subdivision 9 of this subsection.
- c) Conditional Uses. The following uses and activities may be allowed as conditional uses, if allowed in the underlying zoning district (s) or any applicable overlay district, following the procedures in Subdivision 10 (d) of this subsection.
- 1) Any structure that is not elevated on fill or floodproofed in accordance with Subdivision 5 (b) (1) and (2) of this subsection.
 - 2) Storage of any material or equipment below the regulatory flood protection elevation.
 - 3) The cumulative placement of more than 1,000 cubic yards of fill when the fill is not being used to elevate a building in accordance with Subdivision 5 (b) (1) of this subsection.

d) Standards for Flood Fringe Conditional Uses.

- 1) The standards listed in Subdivision 5 (b) (4) through 5 (b) (10) apply to all conditional uses.
- 2) Basements, as defined by Subdivision 2 of this subsection, are subject to the following:
 - i) Residential basement construction is not allowed below the regulatory flood protection elevation.
 - ii) Non-residential basements may be allowed below the regulatory flood protection elevation provided the basement is structurally dry floodproofed in accordance with Subdivision 5 (d) (3) of this subsection.
- 3) All areas of nonresidential buildings, including basements, to be placed below the regulatory flood protection elevation must be floodproofed in accordance with the structurally dry floodproofing classifications in the State Building Code. Structurally dry floodproofing must meet the FP1 or FP2 floodproofing classification in the State Building Code, which requires making the building watertight with the walls substantially impermeable to the passage of water and with structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy.
- 4) The placement of more than 1,000 cubic yards of fill or other similar material on a parcel (other than for the purpose of elevating a building to the regulatory flood protection elevation) must comply with an approved erosion/sedimentation control plan.
 - i) The plan must clearly specify methods to be used to stabilize the fill on site for a flood event at a minimum of the regional (1% chance) flood event.
 - ii) The plan must be prepared and certified by a registered professional engineer or other qualified individual acceptable to the City.
 - iii) The plan may incorporate alternative procedures for removal of the material from the floodplain if adequate flood warning time exists.
- 5) Storage of materials and equipment below the regulatory flood protection elevation must comply with an approved emergency plan providing for removal of such materials within the time available after a flood warning.

Subd. 6. General Floodplain District (GF).

a) Permitted Uses.

- 1) The uses listed in Subdivision 4 (a) of this subsection, Floodway District Permitted Uses, are permitted uses.
- 2) All other uses are subject to the floodway/flood fringe evaluation criteria specified in Subdivision 6 (b) below. Subdivision 4 applies if the proposed use is determined to be in the Floodway District. Subdivision 5 applies if the proposed use is determined to be in the Flood Fringe District.

b) Procedures for Floodway and Flood Fringe Determinations.

- 1) Upon receipt of an application for a permit or other approval within the General Floodplain District, the Zoning Administrator must obtain, review and reasonably utilize any regional flood elevation and floodway data available from a federal, state, or other source.
- 2) If regional flood elevation and floodway data are not readily available, the applicant must furnish additional information, as needed, to determine the regulatory flood protection elevation and whether the proposed use would fall within the Floodway or Flood Fringe District. Information must be consistent with accepted hydrological and hydraulic engineering standards and the standards in Subdivision 6 (b) (3) below.
- 3) The determination of floodway and flood fringe must include the following components, as applicable:
 - i) Estimate the peak discharge of the regional (1% chance) flood.
 - ii) Calculate the water surface profile of the regional flood based upon a hydraulic analysis of the stream channel and overbank areas.
 - iii) Compute the floodway necessary to convey or store the regional flood without increasing flood stages more than one-half (0.5) foot. A lesser stage increase than 0.5 foot is required if, as a result of the stage increase, increased flood damages would result. An equal degree of encroachment on both sides of the stream within the reach must be assumed in computing floodway boundaries.
- 4) The Zoning Administrator will review the submitted information and assess the technical evaluation and the recommended Floodway and/or Flood Fringe District boundary. The assessment must include the cumulative effects of

previous floodway encroachments. The Zoning Administrator may seek technical assistance from a designated engineer or other expert person or agency, including the Department of Natural Resources. Based on this assessment, the Zoning Administrator may approve or deny the application.

- 5) Once the Floodway and Flood Fringe District boundaries have been determined, the Zoning Administrator must process the permit application consistent with the applicable provisions of Subdivisions 4 and 5 of this subsection.

Subd. 7. Land Development Standards

- a) In General. Recognizing that flood prone areas may exist outside of the designated floodplain districts, the requirements of this section apply to all land within the City.
- b) Subdivisions. No land may be subdivided which is unsuitable for reasons of flooding or inadequate drainage, water supply or sewage treatment facilities. Manufactured home parks and recreational vehicle parks or campgrounds are considered subdivisions under this subsection.
 - 1) All lots within the floodplain districts must be able to contain a building site outside of the Floodway District at or above the regulatory flood protection elevation.
 - 2) All subdivisions must have road access both to the subdivision and to the individual building sites no lower than two feet below the regulatory flood protection elevation, unless a flood warning emergency plan for the safe evacuation of all vehicles and people during the regional (1% chance) flood has been approved by the City. The plan must be prepared by a registered engineer or other qualified individual, and must demonstrate that adequate time and personnel exist to carry out the evacuation.
 - 3) For all subdivisions in the floodplain, the Floodway and Flood Fringe District boundaries, the regulatory flood protection elevation and the required elevation of all access roads must be clearly labeled on all required subdivision drawings and platting documents.
 - 4) In the General Floodplain District, applicants must provide the information required in Subdivision 6 (b) of this subsection to determine the regional flood elevation, the Floodway and Flood Fringe District boundaries and the regulatory flood protection elevation for the subdivision site.
 - 5) If a subdivision proposal or other proposed new development is in a flood prone area, any such proposal must be reviewed to assure that:
 - i) All such proposals are consistent with the need to minimize flood damage within the flood prone area.

- ii) All public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage.
 - iii) Adequate drainage is provided to reduce exposure of flood hazard.
- c) Building Sites. If a proposed building site is in a flood prone area, all new construction and substantial improvements (including the placement of manufactured homes) must be:
 - 1) Designed (or modified) and adequately anchored to prevent floatation, collapse, or lateral movement of the building resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
 - 2) Constructed with materials and utility equipment resistant to flood damage.
 - 3) Constructed by methods and practices that minimize flood damage.
 - 4) Constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

Subd. 8. Public Utilities, Railroads, Roads, and Bridges.

- a) Public Utilities. All public utilities and facilities such as gas, electrical, sewer, and water supply systems to be located in the floodplain must be floodproofed in accordance with the State Building Code or elevated to the regulatory flood protection elevation.
- b) Public Transportation Facilities. Railroad tracks, roads, and bridges to be located within the floodplain must comply with Subdivisions 4 and 5 of this subsection. These transportation facilities must be elevated to the regulatory flood protection elevation where failure or interruption of these facilities would result in danger to the public health or safety or where such facilities are essential to the orderly functioning of the area. Minor or auxiliary roads or railroads may be constructed at a lower elevation where failure or interruption of transportation services would not endanger the public health or safety.
- c) On-site Water Supply. Where public utilities are not provided on-site water supply systems must be designed to minimize or eliminate infiltration of flood waters into the systems and are subject to the provisions in Minnesota Rules Chapter 4725.4350, as amended.

Subd. 9. Manufactured Homes, Manufactured Home Parks, and Recreational Vehicles.

- a) Manufactured Homes. New manufactured home parks and expansions to existing manufactured home parks are prohibited in any floodplain district. For existing manufactured home parks or lots of record, the following requirements apply:
 - 1) Placement or replacement of manufactured home units is prohibited in the Floodway District.
 - 2) If allowed in the Flood Fringe District, placement or replacement of manufactured home units is subject to the requirements of Subdivision 5 of this subsection and the following standards.
 - i) New and replacement manufactured homes must be elevated in compliance with Subdivision 5 of this subsection and must be securely anchored to an adequately anchored foundation system that resists flotation, collapse and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state or local anchoring requirements for resisting wind forces.
 - ii) New or replacement manufactured homes in existing manufactured home parks must meet the vehicular access requirements for subdivisions in Subdivision 7 (b) (2).

Subd. 10. Administration.

- a) Zoning Administrator. A Zoning Administrator or other official designated by the City must administer and enforce this subsection.
- b) Permit Requirements.
 - 1) Permit Required. A permit must be obtained from the Zoning Administrator prior to conducting the following activities:
 - i) The erection, addition, modification, rehabilitation, or alteration of any building, structure, or portion thereof. Normal maintenance and repair also requires a permit if such work, separately or in conjunction with other planned work, constitutes a substantial improvement as defined in this subsection.
 - ii) The use or change of use of a building, structure, or land.
 - iii) The construction of a dam, fence, or on-site septic system, although a permit is not required for a farm fence as defined in this subsection.

- iv) The change or extension of a nonconforming use.
 - v) The repair of a structure that has been damaged by flood, fire, tornado, or any other source.
 - vi) The placement of fill, excavation of materials, or the storage of materials or equipment within the floodplain.
 - vii) Relocation or alteration of a watercourse (including new or replacement culverts and bridges), unless a public waters work permit has been applied for.
 - viii) Any other type of “development” as defined in this subsection.
- 2) Application for Permit. Permit applications must be submitted to the Zoning Administrator on forms provided by the Zoning Administrator. The permit application must include the following as applicable:
- i) A site plan showing all pertinent dimensions, existing or proposed buildings, structures, and significant natural features having an influence on the permit.
 - ii) Location of fill or storage of materials in relation to the stream channel.
 - iii) Copies of any required municipal, county, state or federal permits or approvals.
 - iv) Other relevant information requested by the Zoning Administrator as necessary to properly evaluate the permit application.
- 3) Certificate of Zoning Compliance for a New, Altered, or Nonconforming Use. No building, land or structure may be occupied or used in any manner until approval has been issued by the Zoning Administrator stating that the use of the building or land conforms to the requirements of this subsection.
- 4) Certification. The applicant is required to submit certification by a registered professional engineer, registered architect, or registered land surveyor that the finished fill and building elevations were accomplished in compliance with the provisions of this subsection. Floodproofing measures must be certified by a registered professional engineer or registered architect.
- 5) Record of First Floor Elevation. The Zoning Administrator must maintain a record of the elevation of the lowest floor (including basement) of all new buildings and alterations or additions to existing structures in the floodplain. The Zoning Administrator must also maintain a record of the elevation to which structures and alterations or additions to structures are floodproofed.

- 6) Notifications for Watercourse Alterations. Before authorizing any alteration or relocation of a stream, the Zoning Administrator must notify adjacent communities. If the applicant has applied for a permit to work in public waters pursuant to Minnesota Statutes, section 103G.245, this will suffice as adequate notice. A copy of the notification must also be submitted to the Chicago Regional Office of the Federal Emergency Management Agency (FEMA).
 - 7) Notification to FEMA When Physical Changes Increase or Decrease Base Flood Elevations. As soon as is practicable, but not later than six months after the date such supporting information becomes available, the Zoning Administrator must notify the Chicago Regional Office of FEMA of the changes by submitting a copy of the relevant technical or scientific data.
- c) Variances.
- 1) Variance Applications. An application for a variance to the provisions of this subsection will be processed and reviewed in accordance with applicable state statutes and subsection 515.05 of this Code.
 - 2) Adherence to State Floodplain Management Standards. A variance must not allow a use that is not allowed in that district, permit a lower degree of flood protection than the regulatory flood protection elevation for the particular area, or permit standards lower than those required by state law.
 - 3) Additional Variance Criteria. The following additional variance criteria of the Federal Emergency Management Agency must be satisfied:
 - i) Variances must not be issued within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result.
 - ii) Variances may only be issued upon (i) a showing of good and sufficient cause, (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant, and (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
 - iii) Variances may only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - 4) Flood Insurance Notice. The Zoning Administrator must notify the applicant for a variance that: 1) The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage; and 2)

Such construction below the base or regional flood level increases risks to life and property. Such notification must be maintained with a record of all variance actions.

- 5) General Considerations. The City Council may consider the following factors in granting or denying variances and imposing conditions on variances and conditional uses in floodplains:
- i) The potential danger to life and property due to increased flood heights or velocities caused by encroachments.
 - ii) The danger that materials may be swept onto other lands or downstream to the injury of others.
 - iii) The proposed water supply and sanitation systems, if any, and the ability of these systems to minimize the potential for disease, contamination and unsanitary conditions.
 - (iv) The susceptibility of any proposed use and its contents to flood damage and the effect of such damage on the individual owner.
 - (v) The importance of the services to be provided by the proposed use to the community.
 - (vi) The requirements of the facility for a waterfront location.
 - (vii) The availability of viable alternative locations for the proposed use that are not subject to flooding.
 - (viii) The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.
 - (ix) The relationship of the proposed use to the Comprehensive Land Use Plan and flood plain management program for the area.
 - (x) The safety of access to the property in times of flood for ordinary and emergency vehicles.
 - (xi) The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters expected at the site.
- 6) Submittal of Hearing Notices to the Department of Natural Resources (DNR). The Zoning Administrator must submit hearing notices for proposed variances to the DNR sufficiently in advance to provide at least ten days' notice of the hearing. The notice may be sent by electronic mail or U.S. Mail to the respective DNR area hydrologist.

- 7) Submittal of Final Decisions to the DNR. A copy of all decisions granting variances must be forwarded to the DNR within ten days of such action. The notice may be sent by electronic mail or U.S. Mail to the respective DNR area hydrologist.
 - 8) Record-Keeping. The Zoning Administrator must maintain a record of all variance actions, including justification for their issuance, and must report such variances in an annual or biennial report to the Administrator of the National Flood Insurance Program, when requested by the Federal Emergency Management Agency.
- d) Conditional Uses.
- 1) Administrative Review. An application for a conditional use permit under the provisions of this subsection will be processed and reviewed in accordance with Section(s) 515.05 of the zoning code.
 - 2) Factors Used in Decision-Making. In passing upon conditional use applications, the City Council must consider all relevant factors specified in other sections of this subsection, and those factors identified in Subdivision 10 (c) (5) subsection.
 - 3) Conditions Attached to Conditional Use Permits. The City Council may attach such conditions to the granting of conditional use permits as it deems necessary to fulfill the purposes of this subsection. Such conditions may include, but are not limited to, the following:
 - i) Modification of waste treatment and water supply facilities.
 - ii) Limitations on period of use, occupancy, and operation.
 - iii) Imposition of operational controls, sureties, and deed restrictions.
 - iv) Requirements for construction of channel modifications, compensatory storage, dikes, levees, and other protective measures.
 - v) Floodproofing measures, in accordance with the State Building Code and this subsection. The applicant must submit a plan or document certified by a registered professional engineer or architect that the floodproofing measures are consistent with the regulatory flood protection elevation and associated flood factors for the particular area.
 - 4) Submittal of Hearing Notices to the Department of Natural Resources (DNR). The Zoning Administrator must submit hearing notices for proposed conditional uses to the DNR sufficiently in advance to provide at least ten days' notice of the hearing. The notice may be sent by electronic mail or U.S. Mail to the respective DNR area hydrologist.

- 5) Submittal of Final Decisions to the DNR. A copy of all decisions granting conditional uses must be forwarded to the DNR within ten days of such action. The notice may be sent by electronic mail or U.S. Mail to the respective DNR area hydrologist.

Subd. 11. Nonconformities.

- a) Continuance of Nonconformities. A use, structure, or occupancy of land which was lawful before the passage or amendment of this subsection but which is not in conformity with the provisions of this subsection may be continued subject to the following conditions, except that historic structures, as defined in Subdivision 2 of this subsection, are exempt from Subdivision 11 (a) (7) of this subsection.
 - 1) A nonconforming use, structure, or occupancy must not be expanded, changed, enlarged, or altered in a way that increases its flood damage potential or degree of obstruction to flood flows except as provided in Subdivision 11 (a) (2) below. Expansion or enlargement of uses, structures or occupancies within the Floodway District is prohibited.
 - 2) Any addition or structural alteration to a nonconforming structure or nonconforming use that would result in increasing its flood damage potential must be protected to the regulatory flood protection elevation in accordance with any of the elevation on fill or floodproofing techniques (i.e., FP1 thru FP4 floodproofing classifications) allowable in the State Building Code, except as further restricted in Subdivision 11 (a) (3) and Subdivision 11 (a) (7) below.
 - 3) If the cost of all previous and proposed alterations and additions exceeds 50 percent of the market value of any nonconforming structure, that shall be considered substantial improvement, and the entire structure must meet the standards of Subdivision 4 and 5 of this subsection for new structures, depending upon whether the structure is in the Floodway or Flood Fringe District, respectively. The cost of all structural alterations and additions must include all costs such as construction materials and a reasonable cost placed on all manpower or labor.
 - 4) If any nonconforming use, or any use of a nonconforming structure, is discontinued for more than one year, any future use of the premises must conform to this subsection. If the county assessor becomes aware of nonconformities that have been discontinued for a period of more than one year, they will let the city know of these instances in writing.
 - 5) If any nonconformity is substantially damaged, as defined in Subdivision 2 of this subsection, it may not be reconstructed except in conformity with the provisions of this subsection. The applicable provisions for establishing new

uses or new structures in Subdivisions 4 or 5 will apply depending upon whether the use or structure is in the Floodway or Flood Fringe, respectively.

- 6) If any nonconforming use or structure experiences a repetitive loss, as defined in Subdivision 2 of this subsection, it must not be reconstructed except in conformity with the provisions of this subsection.
- 7) Any substantial improvement, as defined in Subdivision 2 of this subsection, to a nonconforming structure requires that the existing structure and any additions must meet the requirements of Subdivision 4 or 5 of this subsection for new structures, depending upon whether the structure is in the Floodway or Flood Fringe District.

Subd. 12. Penalties and Enforcement.

- a) Violation Constitutes a Misdemeanor. Violation of the provisions of this subsection or failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with grants of variances or conditional uses) constitute a misdemeanor and will be punishable as defined by law.
- b) Other Lawful Action. Nothing in this subsection restricts the City from taking such other lawful action as is necessary to prevent or remedy any violation. If the responsible party does not appropriately respond to the Zoning Administrator within the specified period of time, each additional day that lapses will constitute an additional violation of this ordinance and will be prosecuted accordingly.
- c) Enforcement. Violations of the provisions of this ordinance will be investigated and resolved in accordance with the provisions of Section 515.01 of the zoning code. In responding to a suspected ordinance violation, the Zoning Administrator and City Council may utilize the full array of enforcement actions available to it including but not limited to prosecution and fines, injunctions, after-the-fact permits, orders for corrective measures or a request to the National Flood Insurance Program for denial of flood insurance availability to the guilty party. The City must act in good faith to enforce these official controls and to correct ordinance violations to the extent possible so as not to jeopardize its eligibility in the National Flood Insurance Program.

Subd. 13. Amendments.

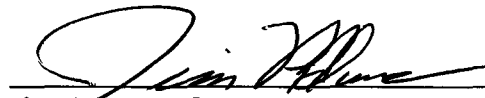
- a) Floodplain Designation; Restrictions on Removal. The floodplain designation on the city's zoning map must not be removed from floodplain areas unless it can be shown that the designation is in error or that the area has been filled to or above the elevation of the regulatory flood protection elevation and is contiguous to lands outside the floodplain. Special exceptions to this rule may be permitted by the Commissioner of the Department of Natural Resources (DNR) if the Commissioner determines that, through other measures, lands are adequately protected for the intended use.

- b) Amendments Require DNR Approval. All amendments to this subsection must be submitted to and approved by the Commissioner of the Department of Natural Resources (DNR) prior to adoption. The Commissioner must approve the amendment prior to community approval.
- c) Map Revisions Require Ordinance Amendments. The floodplain district regulations must be amended to incorporate any revisions by the Federal Emergency Management Agency to the floodplain maps adopted in Subdivision 2 of this subsection.


ARTICLE II. This ordinance is effective upon adoption and 30 days after publication.

First Reading: August 16, 2016
Second Reading: September 6, 2016
Council Adoption: September 6, 2016
Publication: September 15, 2016
Effective Date: October 15, 2016

BY THE CITY COUNCIL


Jim Adams, Mayor

ATTEST:


Kim Therres
Assistant City Manager/Human Resources Manager